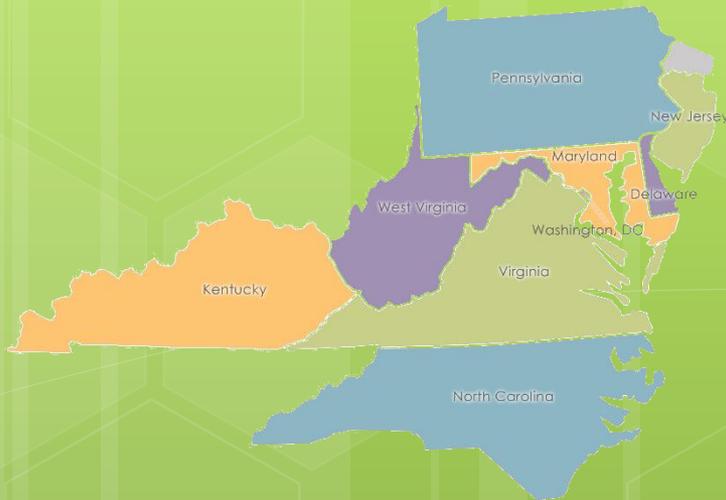




Mid-Atlantic
Telehealth
Resource Center



Serving Delaware, Kentucky,
Maryland, New Jersey, North
Carolina, Pennsylvania, Virginia,
Washington DC and West Virginia

National Disability Forum

October 27, 2016

Telehealth: Background and Technology

What Is Telehealth?

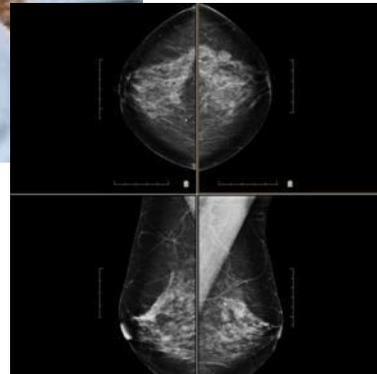
A mechanism for enhancing health care, public health, health administration and health education delivery and support, using electronic communication and information technology.



Synchronous



Asynchronous



Remote Monitoring



mHealth



Text BABY to 511411

Regular checkups help keep baby healthy! Take baby for her next checkup when she's 4 months old. For free or low-cost care, call 877-543-7669.

Get support throughout your pregnancy and baby's first year. You'll get FREE messages each week on topics like prenatal care, labor signs and symptoms, nutrition, breastfeeding, safety, baby's development, and more.

[Click to Sign Up](#)

[Learn More](#)



How are you feeling?

2013-1-31 15:27

- Sad
- Anxious
- Angry
- Stressed
- Calm
- Happy



Drink smarter.

Change the way you think about drinking. The world's most accurate smartphone breathalyzer.

[BUY NOW](#)

Bluetooth | Available on the App Store | Google play



SAMSUNG

Main Menu

- My Profile
- My Messages
- Support Team
- Discussions
- Pause Button
- Events
- News
- Our Stories
- Living Dietress
- Weekly Survey

Copyright © 2013 CHESD, University of Wisconsin

Airtel 10:10 AM

Main Menu Image View

Right Side

Left Side



Necessity Breeds Invention

CRISIS

危

A time of danger;

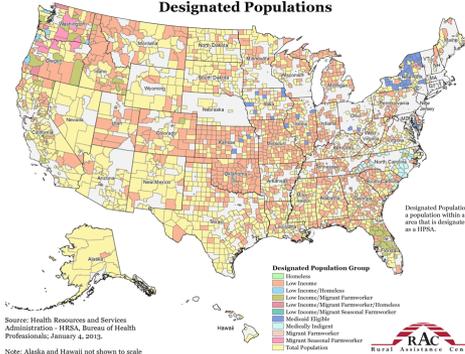
机

A time of opportunity;

"When written in Chinese, the word "crisis" is composed of two characters. One represents danger and the other represents opportunity."

~John F. Kennedy~

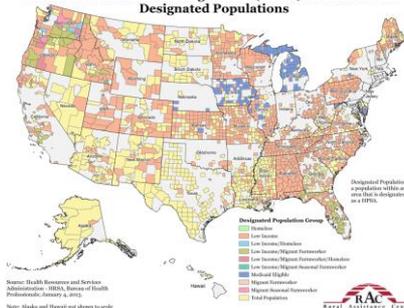
Health Professional Shortage Areas (HPSA) - Primary Health Designated Populations



Health Professional Shortage Areas (HPSA) - Mental Health Designated Populations



Health Professional Shortage Areas (HPSA) - Dental Health Designated Populations

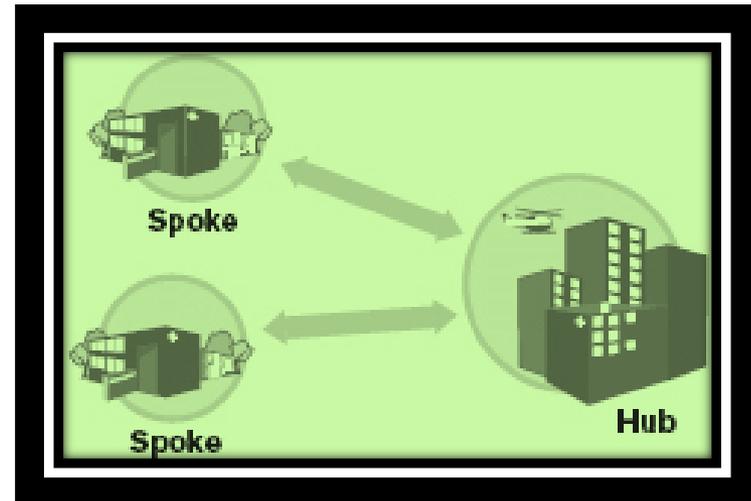
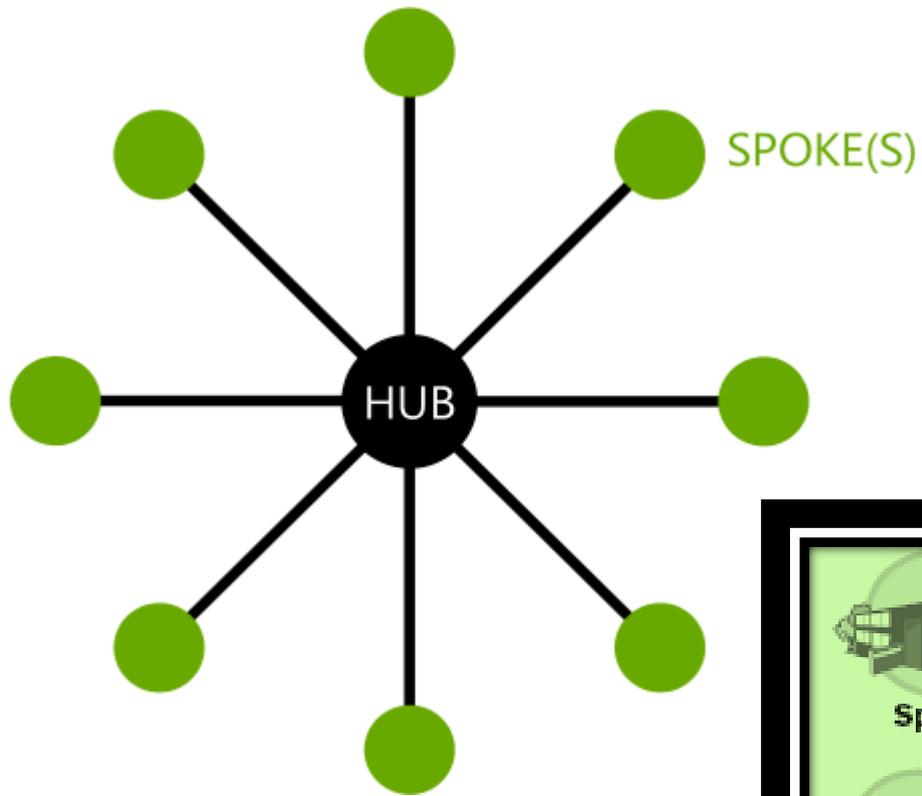


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It's A Good Fit for Rural Health



It Looked Like This





Telestroke – Time is Brain

"Telestroke networks should be deployed wherever a lack of readily available stroke expertise prevents patients in a given community from accessing a primary stroke center (or center of equivalent capability) within a reasonable distance or travel time to permit eligibility for intravenous thrombolytic therapy."²¹

–ASA Recommendations for the implementation of telemedicine within stroke systems of care, 2009



*UVA & Partners have increased the use of life-saving tPA from
0 to 17%*

Stroke Care

Speed, expertise and technology combine to give stroke patients prompt treatment that can prevent or minimize effects from a stroke.



¹⁸ American Heart Association | American Stroke Association

- Administration of tPA at stroke centers = 10% - 20% of ischemic stroke patients
- Administration of tPA outside of stroke centers = 1% - 2% (without telestroke) and 10% - 20% (with telestroke)

Parkinson's Care



Rigidity and trembling of head

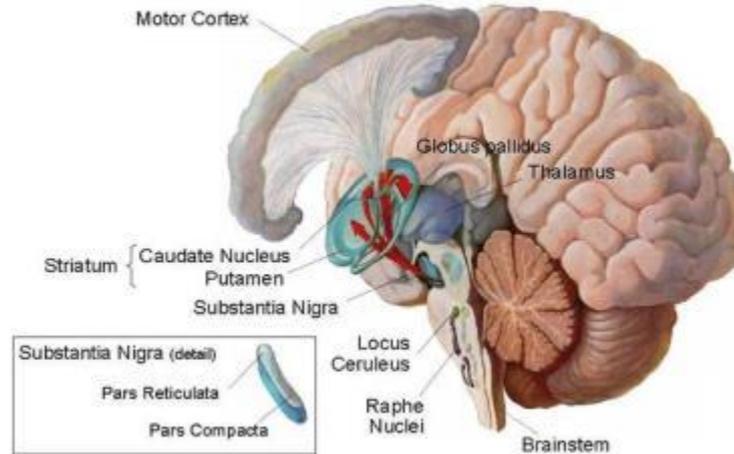
Forward tilt of trunk

Reduced arm swinging

Rigidity and trembling of extremities

Shuffling gait with short steps

Brain Regions Affected by Parkinson's Disease



Parkinson's disease

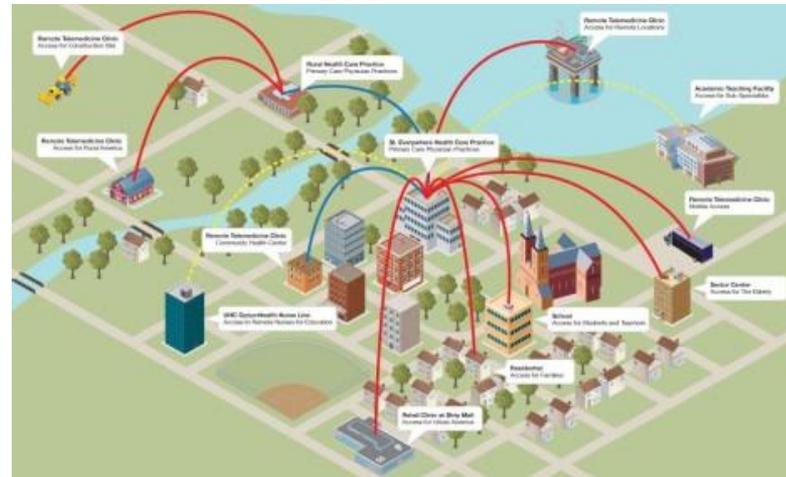
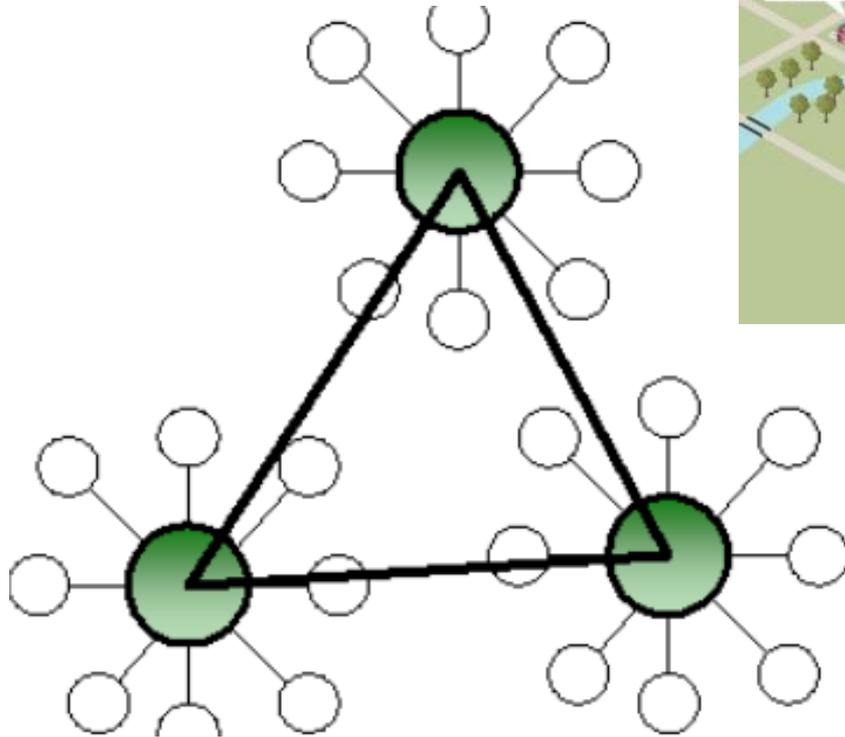


Things Changed



Things Changed

It Now Looks Like This



Urban Telehealth



MEDICAID EXPANSION 101



School Telehealth

Schools address speech therapy needs with new online programs



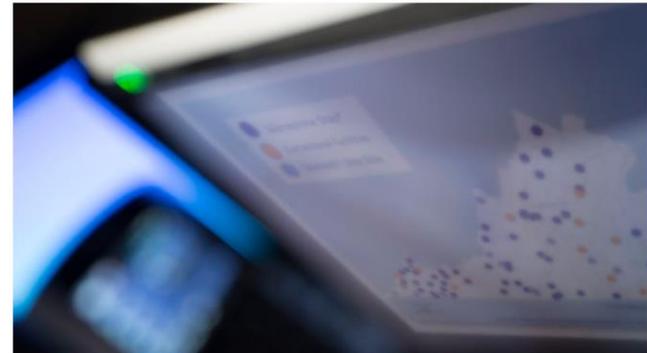
<http://republicanherald.com/news/schools-address-speech-therapy-needs-with-new-online-programs-1.1400717>



FAMILIES PROFESSIONALS

ABOUT

News



VIA - UVA Telehealth Partnership

September 14, 2016 | Grants

When the UVA Telemedicine division was building a pilot program to help deliver healthcare services to communities in rural Virginia, autism needed to be on the agenda.

Successes

Culturally and Linguistically Appropriate Care



Mobile Pre-Hospital Telestroke



Remote Patient Monitoring: Real Patients/Real Outcomes

80+%

MEDICARE
PATIENT
ENROLLMENT

90+%

PATIENT
COMPLIANCE

96+%

PATIENT
SATISFACTION

40+%

READMISSION
REDUCTION

CASE STUDY – UVA

Readmission Reduction for AMI, CHF, COPD, PNA, TKA, THA, CVA, and CABG patients.

Population: ~1200 patients annually - Mix of All Payer & Medicare FFS 65+

Methods: RN Staffed Call Center, Patient Engagement & Navigation, Seamless EMR Interface for Clinician Engagement.



UNIVERSITY OF VIRGINIA MEDICAL
CENTER

Successes



MERCY CARE

[MyChart](#)

[Clinic Locations](#)

[Services](#)

[For Patients](#)

[Contact](#)



Community Impact



Successes



- Chronic Pain
- Palliative Care
- Dementia Care
- HIV/AIDS
- Epilepsy
- Rheumatology
- Addictions
- Hepatitis C
- Diabetes
- Weight Management
- Osteoporosis
- Developmental Pediatrics
- Psychiatry
- High Risk Pregnancy
- And Many More...

Around the Bend



Around the Bend

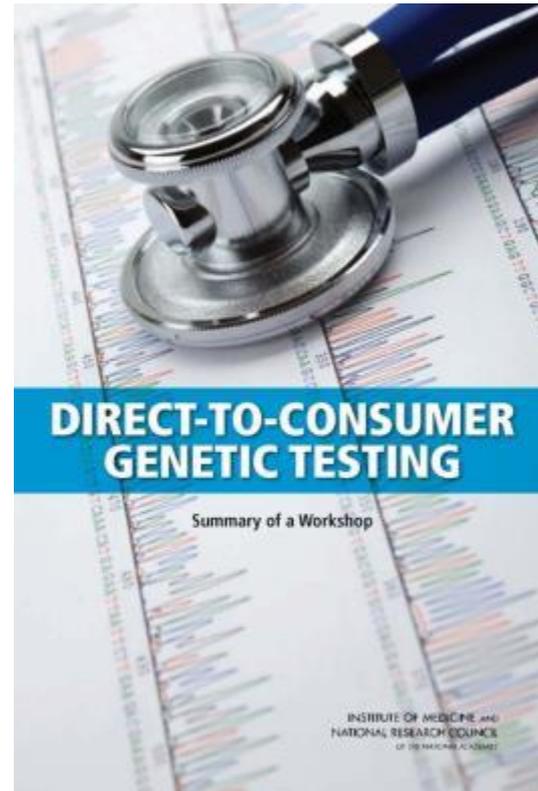
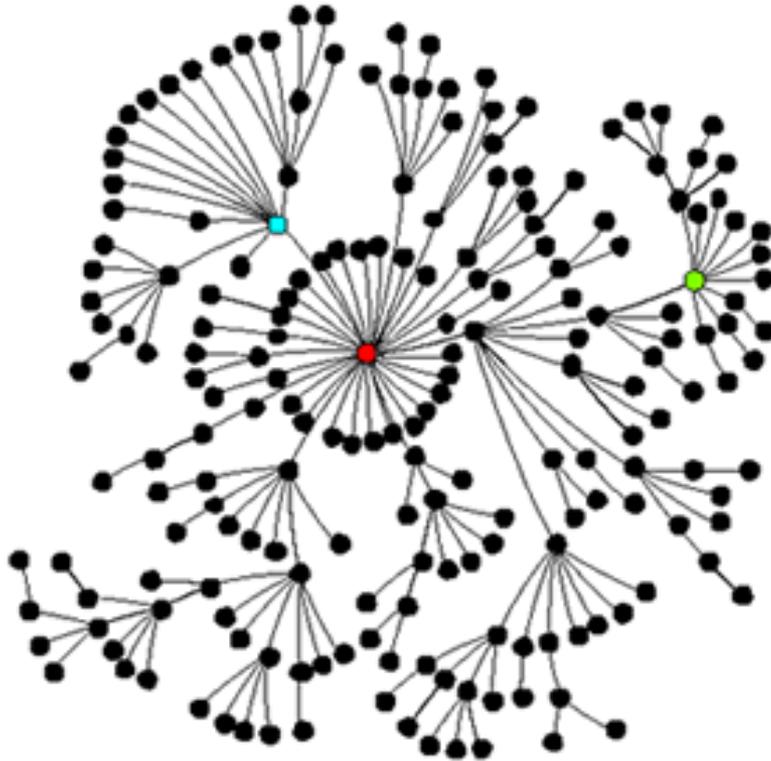


Growing Telehealth Options – On-Demand Medicine



Source: THINK-Health curated list of telehealth companies, 24 September 2015

Around the Bend



Around the Bend



Heart



Lungs



Ears



Skin



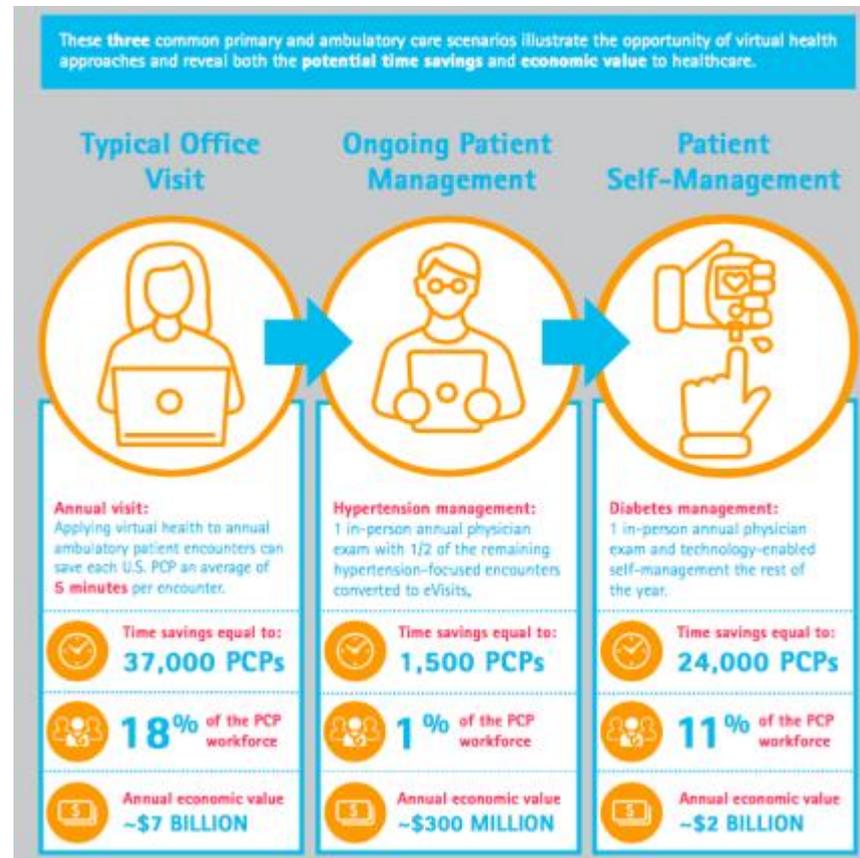
Throat



Temp



Integration of telehealth into mainstream care delivery



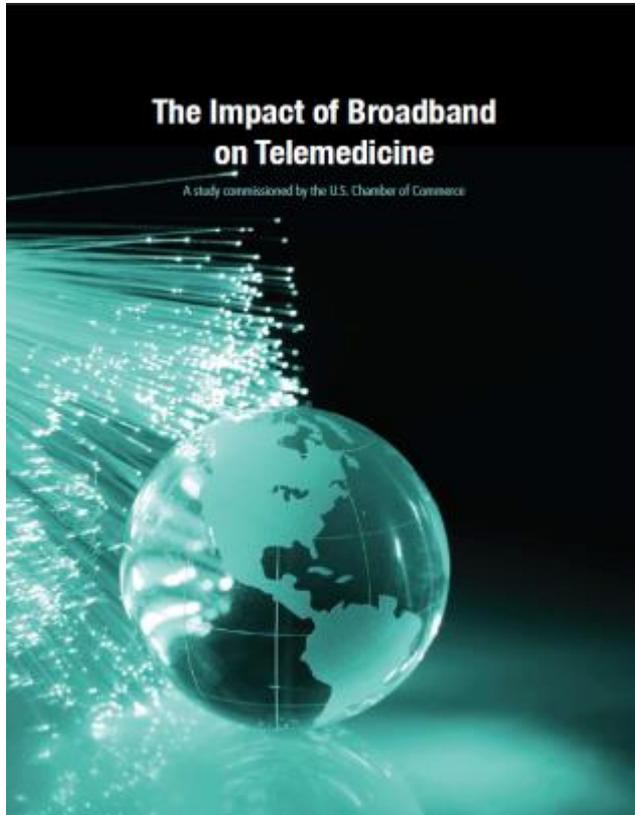
<https://www.accenture.com/us-en/insight-virtual-health.aspx>

But The Struggle Is Real



**"I want you to find a bold and innovative way
to do everything exactly the same way
it's been done for 25 years!"**

What About Rural?



U.S. Chamber of
Commerce, April 2009

TELEMEDICINE CAN'T HELP THE PEOPLE WHO NEED IT THE MOST

WIRED, August 2015



“Telemedicine has been a buzzword for years now, but the rural communities that could benefit most from it also have the least access to fast and reliable Internet—an obvious prerequisite.”

Rural Disparities?

FRIDAY, FEBRUARY 28, 2014

➤ Rural and urban cellphone use are equal, but rural users are much less likely to have smartphones

87% of the global population is a mobile phone user



Cell Phones Per Person

Over 1.20 .901 - 1.20 .601 - .900 .301 - 600 Under .300

source: World Bank, 2011 <http://data.worldbank.com/indicator/IT.CE.SS.SV.DV>



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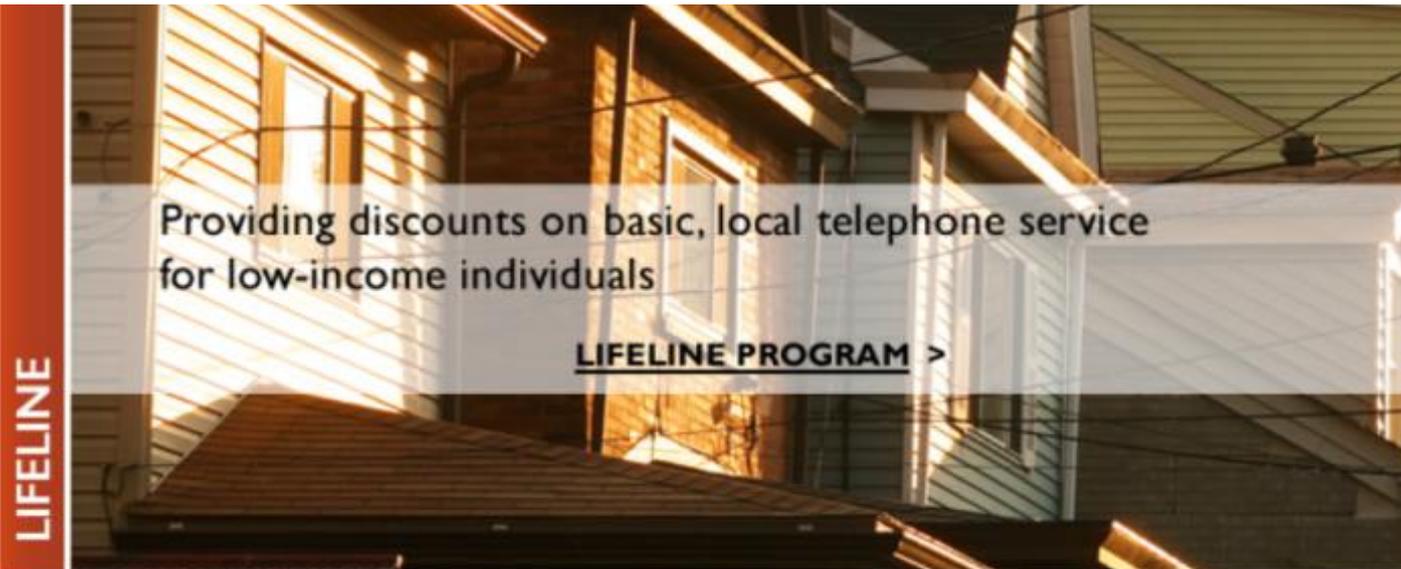
FCC votes in favor of allowing Lifeline low-income subsidies for Internet plans

+ A -

By Roger Fingas

Thursday, June 18, 2015, 11:46 am PT (02:46 pm ET)

The Federal Communications Commission on Thursday voted 3 to 2 in favor of extending the U.S. government's Lifeline program to offer subsidies for broadband Internet, and not just basic phone service.



FCC ruling may pave way for better cell coverage in rural America

By [Spencer Chase](#)

© Copyright Agri-Pulse Communications, Inc.



WASHINGTON, Oct. 20, 2014 - A decision by the Federal Communications Commission may further efforts to bridge the gap between urban and rural America.

The FCC unanimously voted on Friday to adopt a report and order that it says will “promote deployment of the wireless infrastructure necessary to provide the public with ubiquitous, advanced wireless broadband services,” the commission said in a [release](#).



Shaping Policy...

MEDICARE HEALTH INSURANCE
1-800-MEDICARE (1-800-633-4227)

NAME OF BENEFICIARY
JOHN DOE

MEDICARE CLAIM NUMBER
000-00-0000-A

SEX
MALE

IS ENTITLED TO
HOSPITAL (PART A) 01-01-2007
MEDICAL (PART B) 01-01-2007

SIGN HERE → _____



Remote Patient Monitoring

Ways to Control Costs, Improve Outcomes,
Avoid Readmissions & Modify Patient Behavior



**Not Rural,
Not Eligible!**

**No
Reimbursement!**



**Congress Wows With Medicare Telehealth Parity Act
of 2015, But Will It Succeed?**

Quality and Safety?



Federation of
STATE
MEDICAL
BOARDS

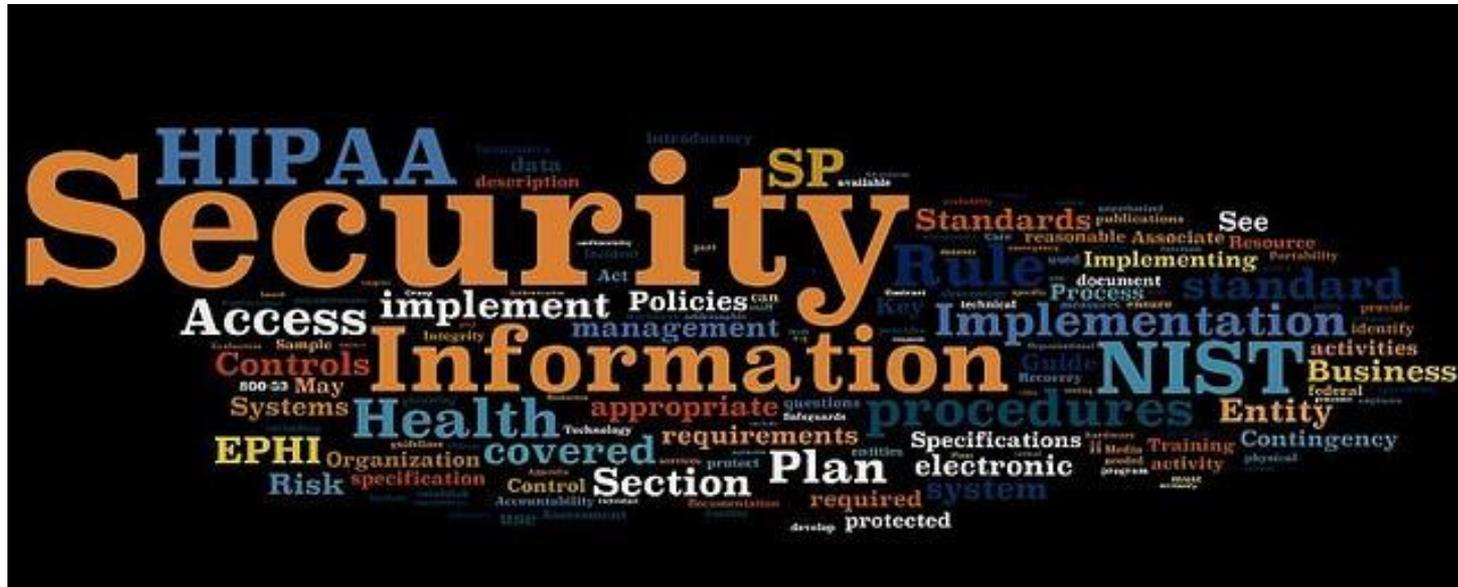
MODEL POLICY FOR THE APPROPRIATE USE OF TELEMEDICINE TECHNOLOGIES IN THE PRACTICE OF MEDICINE

*Report of the State Medical Boards' Appropriate Regulation of
Telemedicine (SMART) Workgroup*

Standard of Care



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Who We Are?

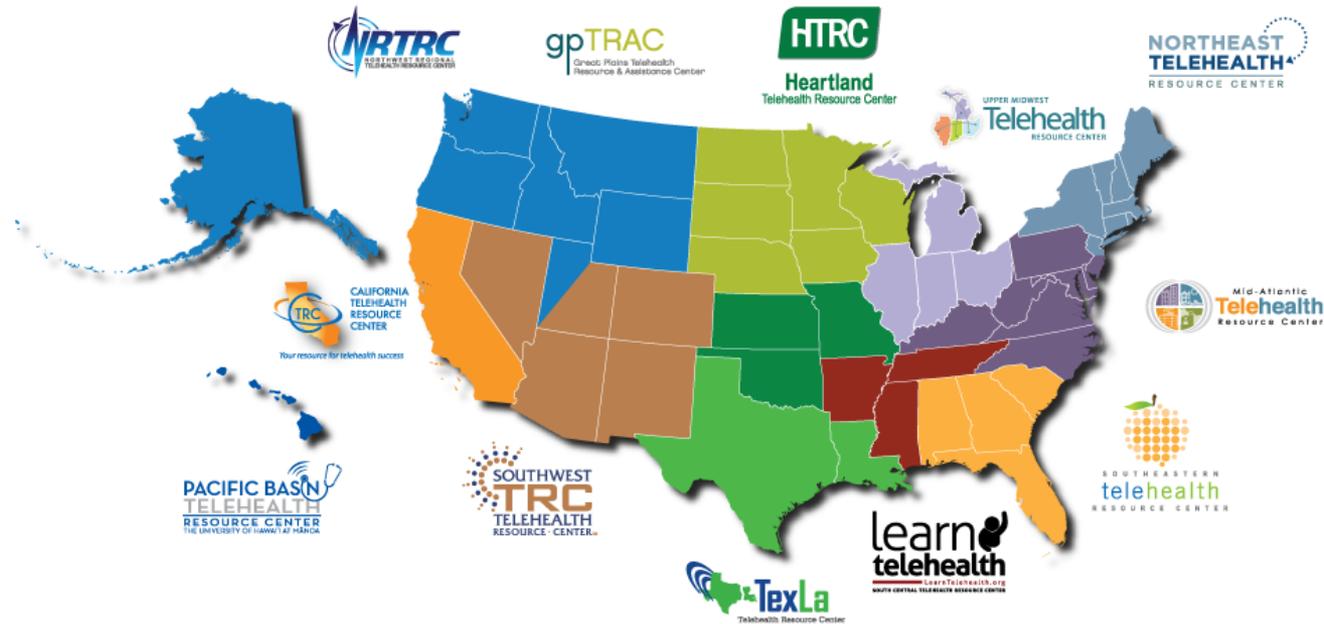


TRCs are funded by the U.S. Department of Health and Human Service's Health Resources and Services Administration (HRSA) Office for the Advancement of Telehealth, which is part of the Office of Rural Health Policy.



Who We Are?

TelehealthResourceCenters.org






2 National Resource Centers

NRTRC	gpTRAC	NETRC
CTRC	HTRC	UMTRC
SWTRC	SCTRC	MATRC
PBTRC	TexLa	SETRC

12 Regional Resource Centers



Mid-Atlantic
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For More Information:



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UVA Center for Telehealth

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Phone: 434.906.4960



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